

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant: § Confirmation No.:  
§  
S. MARK HAUGLAND §  
§  
Filed: Concurrently Herewith § Art Unit:  
§  
Serial No.: Unknown § Examiner:  
§  
For: METHOD OF DETERMINING § Docket No.: H052722.0029US0  
RESISTIVITY AND/OR §  
DIELECTRIC VALUES OF AN §  
EARTH FORMATION AS A §  
FUNCTION OF POSITION WITHIN §  
THE EARTH FORMATION §

**POWER OF ATTORNEY BY ASSIGNEE**

Under the provisions of 37 C.F.R. §§ 3.71 and 3.73(b), the undersigned assignee of record of the entire right, title and interest in the above-identified patent/patent application by virtue of an assignment recorded (check as applicable):

☒ Concurrently Herewith  
☐ Date Recorded \_\_\_\_\_  
☐ Reel \_\_\_\_\_ Frame \_\_\_\_\_

elects to conduct the prosecution of the application/maintenance of the patent to the exclusion of the named inventor(s) or previous assignee(s). The undersigned hereby declares that he is an officer of Assignee and has reviewed the above-referenced assignment and hereby declares that, to the best of his knowledge, title is in the Assignee, W-H ENERGY SERVICES, INC. and further declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true. The Assignee hereby revokes any previous powers of attorney and appoints the following to prosecute this application, maintain this patent and transact all business in the Patent and Trademark Office connected therewith:

Dwayne L. Mason, Reg. No. 38,959  
Charles M. Cox, Reg. No. 29,057  
Douglas W. Rommelmann, Reg. No. 34,418  
George W. Jordan III, Reg. No. 41,880  
John A. Tang, Reg. No. 43,404

Lester L. Hewitt, Reg. No. 25,685  
Richard D. Fladung, Reg. No. 30,834  
David R. Clonts, Reg. No. 36,768  
Richard A. Schafer, Reg. No. 45,078  
Mason A. Gross, Reg. No. 40,006

Please direct all communications to: **AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.**,  
711 Louisiana, Suite 1900, Houston, Texas 77002, (713) 220-5800, FAX: (713) 236-0822, to the  
attention of: George W. Jordan III.

ASSIGNEE  
W-H ENERGY SERVICES, INC.

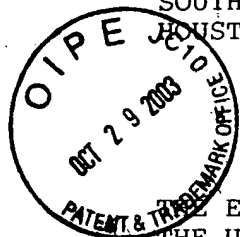
Date: 2/25/02

By:   
Name: Jeff Tepera  
Title: Chief Financial Officer



MAY 07, 2002

AKIN, GUMP, STRAUSS, ET AL  
GEORGE W. JORDAN III  
711 LOUISIANA, SUITE 1900  
SOUTH TOWER  
HOUSTON, TX 77002



RECEIVED	
Akin, Gump, Strauss, Hauer & Feld, L.L.P.	
PTAS	MAY 3 2002
Docket by	<i>[Signature]</i>
Action	<i>[Signature]</i>
Due date	<i>[Signature]</i>

Commissioner for Trademarks  
Arlington, VA 22202-3513  
www.uspto.gov



\*102016152A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/28/2002

REEL/FRAME: 012660/0149  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HAUGLAND, S. MARK

DOC DATE: 02/21/2002

ASSIGNEE:

W-H ENERGY SERVICES, INC.  
10370 RICHMOND AVENUE, SUITE 990  
HOUSTON, TEXAS 77042

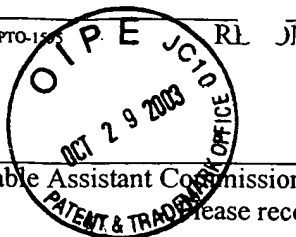
SERIAL NUMBER: 10086043

PATENT NUMBER:

FILING DATE: 02/28/2002

ISSUE DATE:

LAZENA MARTIN, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



03-14-2002



102016152

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICETo the Honorable Assistant Commissioner  
for Patents:

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

S. MARK HAUGLAND

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: February 21, 2002

2. Name and address of receiving party(ies):

Name: W-H Energy Services, Inc.Internal Address: 10370 Richmond Avenue, Suite 990Street Address: 10370 Richmond Avenue, Suite 990City: Houston State: TX Zip: 77042Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: February 21, 2002

A. Patent Application No(s).

B. Patent No(s).

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence  
concerning document should be mailed:Name: George W. Jordan IIIInternal Address: Akin, Gump, Strauss, Hauer & Feld, LLPStreet Address: 711 Louisiana, Suite 1900, South TowerCity: Houston State: TX Zip: 770026. Total number of applications and patents  
involved: ..... 17. Total fee (37 C.F.R. § 3.41) ..... \$ 40

- ☒ Enclosed  
☐ Authorized to be charged to deposit account

8. Deposit account number:

16-2435

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy  
of the original document.

  
George W. Jordan III/Reg. No. 41,880

2/28/02
  
Date
Total number of pages, attachments and document 3

COMMERCIAL CHANNEL INWARD 1/10/04

10/28/02

10/28/02

JC971 U.S. PRO

10/086043



## ASSIGNMENT

WHEREAS, I, S. MARK HAUGLAND, am sole inventor of METHOD OF DETERMINING RESISTIVITY AND/OR DIELECTRIC VALUES OF AN EARTH FORMATION AS A FUNCTION OF POSITION WITHIN THE EARTH FORMATION application for United States Letters Patent which is executed of even date herewith; and

WHEREAS, W-H ENERGY SERVICES, INC., a corporation created and existing under and by virtue of the laws of the State of Texas, is desirous of acquiring the entire right, title and interest in and to the aforesaid invention throughout the world, and all right, title and interest in, to and under any and all Letters Patent of the United States and all other countries throughout the world;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to me in hand paid by W-H ENERGY SERVICES, INC. and for other good and valuable considerations, the receipt of which is hereby acknowledged, I hereby sell, assign, transfer and set over to W-H ENERGY SERVICES, INC., all right, title and interest in and to the said invention throughout the world, and said application for U.S. Letters Patent, and any and all divisions, continuations, reexaminations and reissues thereof, and any and all Letters Patent of the United States and foreign countries which may be granted therefor, the same to be held and enjoyed by W-H ENERGY SERVICES, INC. for its own use and benefit, and for the use and benefit of its successors, assigns, or other legal representatives, to the end of the term or terms for which said Letters Patent of the United States or foreign countries are or may be granted, reexamined or reissued, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made.

And I hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application and from any and all divisions, continuations, and reissues thereof, to W-H ENERGY SERVICES, INC., as assignee of my entire interest, and hereby covenant that I have the full right to convey the entire interest herein assigned, and that I have not executed and will not execute any agreement in conflict herewith.

And I further hereby covenant and agree that I will, at any time, upon request, execute and deliver any and all papers that may be necessary or desirable to perfect the title of said invention and to such Letters Patent as may be granted therefor, to W-H ENERGY SERVICES, INC., its successors, assigns, or other legal representatives and that if W-H ENERGY SERVICES, INC., its successors, assigns or other legal representatives shall desire to file any divisional or continuation applications or to secure a reexamination or reissue of such Letters Patent, or to file a disclaimer relating thereto, will upon request, sign all papers, make all rightful oaths and do all lawful acts requisite for the filing of such divisional or continuation application, or such application for reissue and the procuring thereof, and for the filing of such disclaimer, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

And I do further covenant and agree that I will, at any time upon request, communicate to W-H ENERGY SERVICES, INC., its successors, assigns or other legal representatives,

such facts relating to said invention and Letters Patent or the file history thereof as may be known to me, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

EXECUTED THIS 21<sup>st</sup> day of February, 2002.

S. Mark Haugland  
S. MARK HAUGLAND

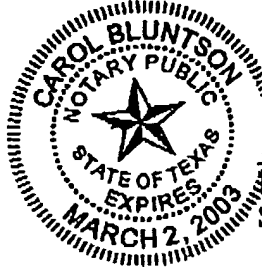
STATE OF TEXAS

§  
§  
§

COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this day personally appeared S. MARK HAUGLAND, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this 21<sup>st</sup> day of February, 2002.



Carol Bluntson  
NOTARY PUBLIC IN AND FOR THE  
STATE OF TEXAS

\* \* \* \* \*

Attorney Docket No. H052722.0029US0SOLE/JOINT INVENTOR  
ORIGINAL/SUBSTITUTE/CIP**DECLARATION**

As a below named inventor, I hereby declare that: my residence, post office address, and citizenship are as stated below next to my name. I believe I am the original, first, and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHOD OF DETERMINING RESISTIVITY AND/OR DIELECTRIC VALUES OF AN EARTH FORMATION AS A FUNCTION OF POSITION WITHIN THE EARTH FORMATION**

as described in the specification [ X ] attached or [ ] of patent Application Serial No. \_\_\_\_\_, filed \_\_\_\_\_ and amended on \_\_\_\_\_.

I hereby state that I have reviewed and understood the contents of the above identified specification, including the claims, as amended by any amendment referred to above; that I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application; that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representative or assigns more than twelve months prior to this application; and that I acknowledge the duty to disclose information of which I am aware which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations § 1.56(a). Such information is material when it is not cumulative to information already of record or being made of record in the application, and

- (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) it refutes, or is inconsistent with, a position the applicant has taken or may take in:
  - (i) opposing an argument of unpatentability relied on by the Office, or
  - (ii) asserting an argument of patentability.

I hereby claim foreign priority benefits under Title 35, United States Code § 119 of any foreign application(s) for patent or inventor's certificates listed below and have also identified below any foreign application(s) having a filing date before that of the application(s) on which priority is claimed:

COUNTRY	APPLICATION NUMBER	DATE OF FILING	PRIORITY CLAIMED UNDER 35 USC 119
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

I hereby claim the benefit under Title 35 United States Code § 120 of any United States application(s) listed below and, insofar as any subject matter of any claim of this application is not disclosed in the prior United States Application, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application: \_\_\_\_\_.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF SOLE INVENTOR	INVENTOR'S SIGNATURE	DATE
S. MARK HAUGLAND	<i>S. Mark Haugland</i>	2/21/02
RESIDENCE	CITIZENSHIP	
Houston, Texas	U.S.A.	
MAILING ADDRESS		
10715 Piping Rock, Houston, Texas 77042		